AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A zoom lens system comprising a positive first lens group, a negative second lens group, a positive third lens group, and a negative fourth lens group, in this order from an object,

wherein zooming is performed by moving each of said positive first through said negative fourth lens groups along the optical axis;

wherein said zoom lens system satisfies the following conditions:

$$0.5 < (D_{12T} - D_{12W})/f_W < 1.0$$

$$1.0 < \Delta X_{1G}/\Delta X_{4G} < 1.5$$

$$\underline{0.1 < f_W/f_{1G} < 0.3}$$

wherein

D_{12T} designates the axial distance between said positive first lens group and said negative second lens group at the long focal length extremity;

D_{12W} designates the axial distance between said positive first lens group and said negative second lens group at the short focal length extremity;

f_W designates the focal length of the entire the zoom lens system at the short focal length extremity;

ΔX_{1G} designates the traveling distance of said positive first lens group from the short focal length extremity to the long focal length extremity; ~~and~~

ΔX_{4G} designates the traveling distance of said negative fourth lens group from the short focal length extremity to the long focal length extremity; and

f_{1G} designates the focal length of said positive first lens group.

2. (Canceled)

3. (Original) The zoom lens system according to claim 1, satisfying the following condition:

$$0.05 < (D_{23W} - D_{23T})/ f_W < 0.15$$

wherein

D_{23W} designates the axial distance between said negative second lens group and said positive third lens group at the short focal length extremity; and

D_{23T} designates the axial distance between said negative second and said positive third lens group at the long focal length extremity.

4. (Original) The zoom lens system according to claim 1, satisfying the following condition:

$$0.1 < (f_{23T}/f_{23W})/(f_T / f_W) < 0.4$$

wherein

f_{23T} designates the combined focal length of said negative second lens group and said positive third lens group at the long focal length extremity;

f_{23W} designates the combined focal length of said negative second lens group and said positive third lens group at the short focal length extremity; and

f_T designates the focal length of the entire the zoom lens system at the long focal length extremity.

5. (Original) The zoom lens system according to claim 1, satisfying the following condition:

$$1.15 < h_{3G} / h_1 < 1.30$$

wherein

h_1 designates the height of paraxial light ray, from the optical axis, being incident on the most object-side surface of said positive first lens group at the short focal length extremity; and

h_{3G} designates the height of the paraxial light ray, from the optical axis, being incident on the most image-side surface of said positive third lens group at the short focal length extremity, when the paraxial light ray has been incident at the height of h1 on the most object-side surface of said positive first lens group.

6. (Original) The zoom lens system according to claim 1, wherein said positive third lens group comprises at least one aspherical surface that satisfies the following condition:

$$-30 < \Delta I_{ASP} < -10$$

wherein

ΔI_{ASP} designates the amount of change of the spherical aberration coefficient due to the aspherical surface in said positive third lens group under the condition that the focal length at the short focal length extremity is converted to 1.0.

7. (Original) The zoom lens system according to claim 1, wherein said negative

fourth lens group comprises at least one aspherical surface that satisfies the following condition:

$$0 < \Delta V_{ASP} < 3$$

wherein

ΔV_{ASP} designates the amount of change of the distortion coefficient due to the aspherical surface in said negative fourth lens group under the condition that the focal length at the short focal length extremity is converted to 1.0.

8. (New) A zoom lens system comprising a positive first lens group, a negative second lens group, a positive third lens group, and a negative fourth lens group, in this order from an object,

wherein zooming is performed by moving each of said positive first through said negative fourth lens groups along the optical axis;

wherein said zoom lens system satisfies the following conditions:

$$0.5 < (D_{12T} - D_{12W})/f_W < 1.0$$

$$1.0 < \Delta X_{1G}/\Delta X_{4G} < 1.5$$

$$0.05 < (D_{23W} - D_{23T})/f_W < 0.15$$

wherein

D_{12T} designates the axial distance between said positive first lens group and said negative second lens group at the long focal length extremity;

D_{12W} designates the axial distance between said positive first lens group and said negative second lens group at the short focal length extremity;

f_W designates the focal length of the entire the zoom lens system at the short focal length extremity;

ΔX_{1G} designates the traveling distance of said positive first lens group from the short focal length extremity to the long focal length extremity;

ΔX_{4G} designates the traveling distance of said negative fourth lens group from the short focal length extremity to the long focal length extremity;

D_{23W} designates the axial distance between said negative second lens group and said positive third lens group at the short focal length extremity; and

D_{23T} designates the axial distance between said negative second and said positive third lens group at the long focal length extremity.

9. (New) The zoom lens system according to claim 8, satisfying the following condition:

$$0.1 < (f_{23T}/f_{23W})/(f_T / f_W) < 0.4$$

wherein

f_{23T} designates the combined focal length of said negative second lens group and said positive third lens group at the long focal length extremity;

f_{23W} designates the combined focal length of said negative second lens group and said positive third lens group at the short focal length extremity; and

f_T designates the focal length of the entire the zoom lens system at the long focal length extremity.

10. (New) The zoom lens system according to claim 8, satisfying the following condition:

$$1.15 < h_{3G} / h_1 < 1.30$$

wherein

h_1 designates the height of paraxial light ray, from the optical axis, being incident on the most object-side surface of said positive first lens group at the short focal length extremity; and

h_{3G} designates the height of the paraxial light ray, from the optical axis, being incident on the most image-side surface of said positive third lens group at the short focal length extremity, when the paraxial light ray has been incident at the height of h1 on the most object-side surface of said positive first lens group.

11. (New) The zoom lens system according to claim 8, wherein said positive third lens group comprises at least one aspherical surface that satisfies the following condition:

$$-30 < \Delta I_{ASP} < -10$$

wherein

ΔI_{ASP} designates the amount of change of the spherical aberration coefficient due to the aspherical surface in said positive third lens group under the condition that the focal length at the short focal length extremity is converted to 1.0.

12. (New) The zoom lens system according to claim 8, wherein said negative fourth lens group comprises at least one aspherical surface that satisfies the following condition:

$$0 < \Delta V_{ASP} < 3$$

wherein

ΔV_{ASP} designates the amount of change of the distortion coefficient due to the aspherical surface in said negative fourth lens group under the condition that the focal length at the short focal length extremity is converted to 1.0.

13. (New) A zoom lens system comprising a positive first lens group, a negative second lens group, a positive third lens group, and a negative fourth lens group, in this order from an object,

wherein zooming is performed by moving each of said positive first through said negative fourth lens groups along the optical axis;

wherein said zoom lens system satisfies the following conditions:

$$0.5 < (D_{12T} - D_{12W})/f_W < 1.0$$

$$1.0 < \Delta X_{1G}/\Delta X_{4G} < 1.5$$

$$0.1 < (f_{23T}/f_{23W})/(f_T / f_W) < 0.4$$

wherein

D_{12T} designates the axial distance between said positive first lens group and said negative second lens group at the long focal length extremity;

D_{12W} designates the axial distance between said positive first lens group and said negative second lens group at the short focal length extremity;

f_W designates the focal length of the entire the zoom lens system at the short focal length extremity;

ΔX_{1G} designates the traveling distance of said positive first lens group from the short focal length extremity to the long focal length extremity;

ΔX_{4G} designates the traveling distance of said negative fourth lens group from the short focal length extremity to the long focal length extremity

f_{23T} designates the combined focal length of said negative second lens group and said positive third lens group at the long focal length extremity;

f_{23W} designates the combined focal length of said negative second lens group and said positive third lens group at the short focal length extremity; and

f_T designates the focal length of the entire the zoom lens system at the long focal length extremity.

14. (New) The zoom lens system according to claim 13, satisfying the following condition:

$$1.15 < h_{3G} / h_1 < 1.30$$

wherein

h_1 designates the height of paraxial light ray, from the optical axis, being incident on the most object-side surface of said positive first lens group at the short focal length extremity; and

h_{3G} designates the height of the paraxial light ray, from the optical axis, being incident

on the most image-side surface of said positive third lens group at the short focal

length extremity, when the paraxial light ray has been incident at the height of h1 on

the most object-side surface of said positive first lens group.

15. (New) The zoom lens system according to claim 13, wherein said positive

third lens group comprises at least one aspherical surface that satisfies the following

condition:

$-30 < \Delta I_{ASP} < -10$

wherein

ΔI_{ASP} designates the amount of change of the spherical

aberration coefficient due to the aspherical surface in said positive third lens group

under the condition that the focal length at the short focal length extremity is converted

to 1.0.

16. (New) The zoom lens system according to claim 13, wherein said negative

fourth lens group comprises at least one aspherical surface that satisfies the following

condition:

$0 < \Delta V_{ASP} < 3$

wherein

ΔV_{ASP} designates the amount of change of the distortion coefficient due to the

aspherical surface in said negative fourth lens group under the condition that the focal

length at the short focal length extremity is converted to 1.0.

17. (New) A zoom lens system comprising a positive first lens group, a negative second lens group, a positive third lens group, and a negative fourth lens group, in this order from an object,

wherein zooming is performed by moving each of said positive first through said negative fourth lens groups along the optical axis;

wherein said zoom lens system satisfies the following conditions:

$0.5 < (D_{12T} - D_{12W})/f_W < 1.0$

$1.0 < \Delta X_{1G}/\Delta X_{4G} < 1.5$

$1.15 < h_{3G} / h_1 < 1.30$

wherein

D_{12T} designates the axial distance between said positive first lens group and said negative second lens group at the long focal length extremity;

D_{12W} designates the axial distance between said positive first lens group and said negative second lens group at the short focal length extremity;

f_W designates the focal length of the entire the zoom lens system at the short focal length extremity;

ΔX_{1G} designates the traveling distance of said positive first lens group from the short focal length extremity to the long focal length extremity;

ΔX_{4G} designates the traveling distance of said negative fourth lens group from the short focal length extremity to the long focal length extremity;

h_1 designates the height of paraxial light ray, from the optical axis, being incident on the most object-side surface of said positive first lens group at the short focal length extremity; and

h_{3G} designates the height of the paraxial light ray, from the optical axis, being incident on the most image-side surface of said positive third lens group at the short focal length extremity, when the paraxial light ray has been incident at the height of h1 on the most object-side surface of said positive first lens group.

18. (New) The zoom lens system according to claim 17, wherein said positive third lens group comprises at least one aspherical surface that satisfies the following condition:

$$-30 < \Delta I_{ASP} < -10$$

wherein

ΔI_{ASP} designates the amount of change of the spherical aberration coefficient due to the aspherical surface in said positive third lens group under the condition that the focal length at the short focal length extremity is converted to 1.0.

19. (New) The zoom lens system according to claim 17, wherein said negative fourth lens group comprises at least one aspherical surface that satisfies the following condition:

$$0 < \Delta V_{ASP} < 3$$

wherein

ΔV_{ASP} designates the amount of change of the distortion coefficient due to the aspherical surface in said negative fourth lens group under the condition that the focal length at the short focal length extremity is converted to 1.0.